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WAR FOOD ADMINISTRATION

Office of Distribution

Southern Region

THE PROSPECTIVE FRUIT AND VEGETABLE WOODEN
CONTAINER SITUATION IN THE SOUTHERN REGION

by

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SUMMARY AND RECOMMENDATIONS

Although marked reductions have occurred in the number of several individual container types produced during the period covered in this study, the shrinkage in total carrying capacity of all fruit and vegetable containers manufactured, and estimated to be manufactured, is negligible. Plant facilities and capacities apparently exist to produce most essential needs for prospective production provided labor and materials, the principal limitations, are made available.

Quarterly checks by area supervisors with an adequate sample of key manufacturers to determine their rate of production as compared with their stated estimate, their labor and raw material situation, are strongly recommended.

Serious specific production problems should be referred immediately to appropriate local agency offices for corrective action. General widespread adverse conditions should be also referred for action to regional or federal offices.

Seventy-one plants indicated a difficult labor situation limiting production. It is recommended that this situation be called to the attention of appropriate War Manpower Commission officials for necessary action. Names and addresses of these manufacturers are available.

The limited supplies of lumber and veneer reported by many manufacturers can be attributed largely to the reduction in the number of independent loggers. These loggers formerly cut logs for veneer and lumber mills, but because of labor prices, equipment shortages and other factors have quit, forcing many of the veneer and lumber mills to engage in logging to secure a supply of logs. While labor and equipment shortages are the major factors limiting production, log ceilings have played an important role in drying up the normal supply of veneer logs. Relative priorities on the use of lumber and veneer are additional container production limitations.

Limited quantities of containers salvaged results in high cost of collection by dealers in this Region. The percentage salvaged of the potential available is quite low. It is recommended that trade associations of food retailers and wholesalers agree on and promote a plan to deliver no fruits and vegetables in wooden containers to retailers or other wholesale buyers unless a given minimum percentage of similar wooden containers are at the same time collected by the wholesaler, for which a financial credit is given. Established used container dealers can then readily collect from wholesalers, or in their absence, wholesalers may elect to act as dealers or readily induce the establishment of a used container dealer.

The recovery of containers from military posts should continue as now accomplished, but salvage from this source would be implemented by the establishment of additional dealers. Many military posts, particularly when distant from cities, are experiencing difficulties in disposing of containers.

Principal reuse of containers in the Region is secured through carlot purchases from northern used container dealers in terminal markets. It is believed that a marked increase in sales of this nature would be effected if a handling charge by used container dealers in this Region were allowed by the Office of Price Administration. It is therefore recommended that MPR-434 be amended so as to allow a second dealer mark-up on carlots of used containers purchased from distant dealers.

A directive requiring shippers to include a minimum percentage of used containers is recommended. This requirement should be extended only to types of containers readily salvageable.

FOREWORD

A brief summary of the relative importance of fruits and vegetables in the Southern Region as compared with the country as a whole affords some indication of the need for information on the container situation in this Region.

Carlot shipments indicate that more than one-half the peaches, about one-half the grapefruit, one-third the oranges, one-fourth the truck crops, and approximately one-seventh of the apples shipped in the United States originate in the Southern Region.

When estimated truck shipments are added to carlot movements, the equivalent carloads of fruits and vegetables originating annually in the Southern Region would make up a train reaching from Jacksonville, Florida, to Los Angeles, California. If each of these cars were loaded with produce in one-bushel containers, 500 to the car, it would require 140 million containers. This survey indicates that in 1942 container manufacturers in the Southern Region produced 100 million more wooden containers than the above figure; however, since approximately one-half the total number were small sized berry cups and till baskets, the total demand exceeded the supply.

Salvage of containers in the larger terminal markets and their reuse in nearby producing areas is more readily accomplished than in regions more distant from large consuming centers. Since the out-shipments of fruits and vegetables in the Southern Region exceed the unloads to such a great degree, this Region cannot expect benefits from a reuse program to the degree of those with a comparatively high concentration of population. Reduction in freight rates on used containers to Southern territory has been a material aid in lessening this problem.

Increasing numbers of container manufacturers are obtaining war contracts and supplies of containers for fruits and vegetables are necessarily affected.

A shortage of wooden shipping containers became pronounced in the latter portion of the 1942-43 Florida shipping season. An acute shortage of containers for the shipment of fresh fruits and vegetables for the 1943 season in the Southern Region was expected; therefore, during the summer of 1943 a study was instituted to examine the status and prospects of container manufacture in relation to the possible need.

A regionwide salvage and reuse program was announced by the Food Distribution Administration early in 1943. An estimate of the effectiveness of this program in the Southern Region is included.

In September of 1943 a Regional Memorandum by the Chief of the Fruit and Vegetable Division announced a purchasing service on used containers. A brief resume of this program is given.

ANALYSIS OF THE WOODEN CONTAINER SITUATION
FOR FRUITS AND VEGETABLES IN THE SOUTHERN REGION

PROCEDURE

A form, "Survey of Wooden Container Manufacturers", was prepared and approval of this form by the Bureau of the Budget was obtained. Area supervisors in each state of the Region collected the information by personal visits to manufacturing plants. Lists of manufacturers in each state were supplied by the Regional Office with instructions to supplement or adjust the lists according to the current local situation.

Although as nearly complete coverage as feasible was attempted, it is recognized that the survey does not cover all plants in the Region, nor is information complete on all concerns contacted. Field work was done in some cases by individuals who had not previously done work of this nature.

The major portion of the field work was done in October, and the first half of November, 1943; however, field work was in a few cases extended beyond this period.

RESULTS

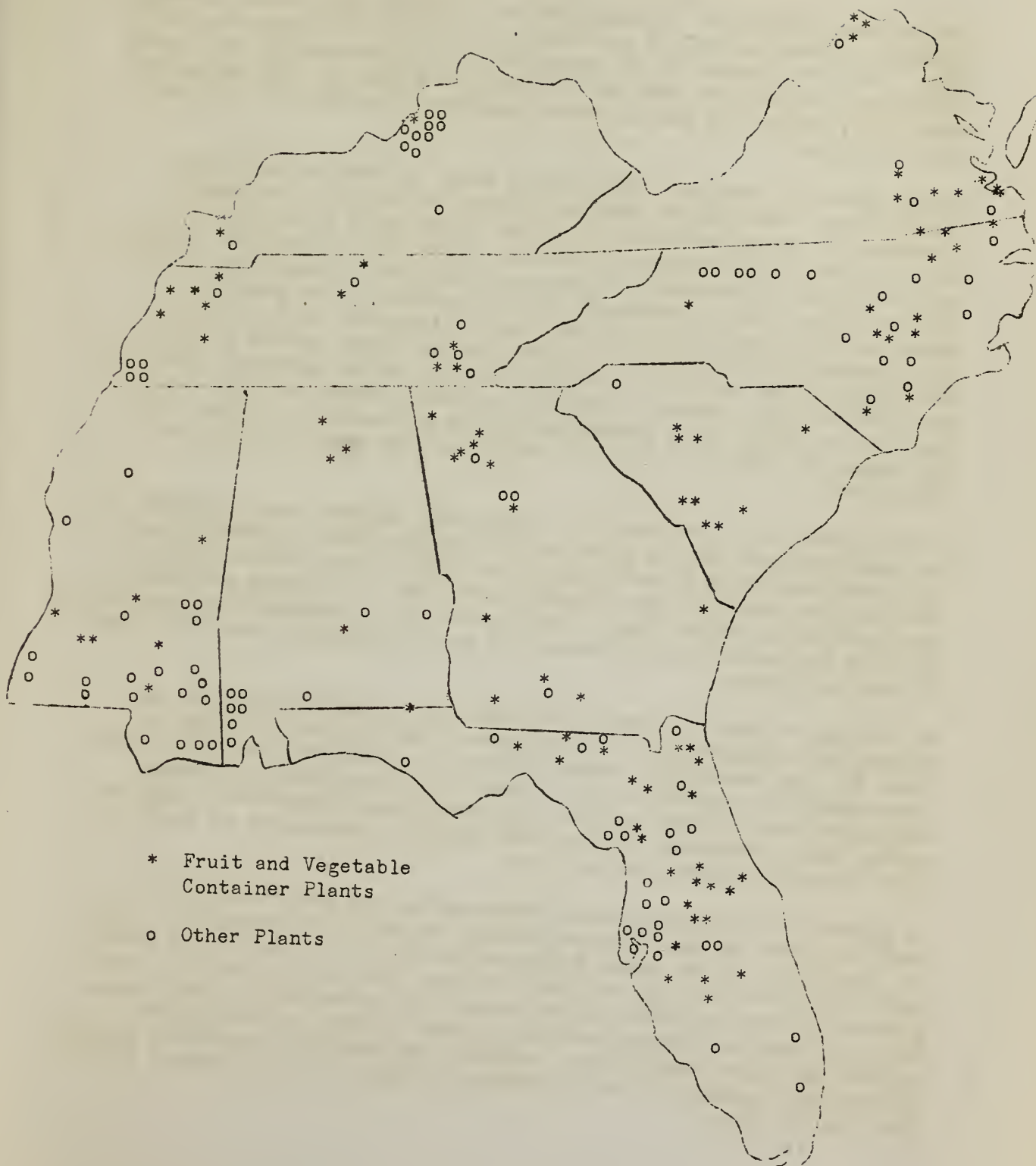
Number and Distribution of Plants

Map 1 indicates the distribution of plants contacted in this study. Information was obtained on 198 plants; in some cases, however, only incomplete data were obtained.

There is a tendency toward location of plants in areas of heavy fruit and vegetable production, although the veneer and shook is in many cases produced separately and sometimes at a considerable distance from the manufacturing plant. In one instance it was observed that shook was shipped to this Region from the State of Washington. Final assembly or setting up of nailed and wirebound crates and boxes is generally accomplished by the shipper of fruit and vegetables.

There is a considerable amount of manufacture of containers for trans-regional, interregional and export delivery; however, this information was developed incidentally, was not covered by the schedule used in the survey, and quantitative data are not available.

Map 1.- DISTRIBUTION OF PLANTS COVERED BY SURVEY



Production and Capacity of Containers Manufactured

The Regional production of containers by types and sizes with percentage changes is given in Table 1 for the years 1942-43 with estimates for 1944. The total number of all types of fruit and vegetable containers manufactured appears to have been reduced from 1942 to 1943 by approximately 15 percent, and the estimated production in 1944 is about the same as in 1943.

Thirty types of containers and several sizes in some instances are reported on. From 1942 to 1943 a decrease in number of containers manufactured is indicated for 20 of the 30 types; 9 types showed an increase and 1 type remained unchanged. From 1943 to 1944 the manufacture of 14 types decreased; 11 increased and 5 were unchanged. From 1942 to 1944, 19 types decreased and 11 increased. The greatest numerical reduction, from 1942 to 1944, is indicated in berry cups. The Strawberry acreage which accounts for the major portion of these cups has declined markedly. The greatest indicated numerical increase from 1942 to 1944 occurs in standard wirebound citrus crates. The increase in citrus crate production and in shipments of citrus, from the season of 1941-42 to that of 1942-43 season, was in both cases 12 percent.

On some items the relationship of containers produced and shipments of the commodities is not as close as it is with citrus. Although apple and peach production dropped sharply in 1943 in the Southern Region, this was not evidenced by a proportionate drop in shipping containers manufactured for these fruits. It appears that a considerable proportion of peach containers are, in seasons of heavy production, obtained from without the Region.

An attempt was made to convert the capacity of all manufactured containers to a common unit of 500 bushels. The results are shown in Table 2. For commodities packed in bushel containers, and perhaps for some commodities packed in other containers, this unit facilitates comparison with shipped carlots. Although some inaccuracies occur in making this conversion, it does make possible comparisons of relative total container capacities by years.

It should be noted that the percentage change in total capacity is much less than is the percentage change in number of containers. This is largely due to the great reduction in small till baskets and berry cups and to the increase in citrus crates, but there is perhaps a very general tendency to shift to the larger size containers of many types. This has been implemented somewhat by more liberal ceiling prices allowed on larger containers. According to this data, the total capacity of containers estimated to be produced in 1944 is only 1 percent less than that of 1942.

Table 1.- Production of wooden containers for fruit and vegetables
Southern Region

Type	Containers	Size	Number of manufacturers		Reported production		Percentage changes	
			1942 : 1943	1943 : 1944	1942 : 1943	1943 : 1944	1942 : 1943	1943 : 1944
					Thousands of containers		to	to
							1943	1944
Apple barrels			1	1	22	7	-68	+614
Apple boxes		1 bu.			938	937	2/	-19
"		1-1/8 bu.			2,265	2,209	-02	+06
Total apple boxes			11	12	3,203	3,146	-02	-01
Avocado crates			1	1	25	10	-60	0
Banana crates			1	1	60	75	+25	0
Citrus crates, nailed		1-3/5 bu.			8,663	9,682	+12	-20
"		4/5 bu.			803	853	+06	+05
"	wirebound	1-3/5 bu.			25,398	28,601	+13	+02
"	"	4/5 bu.			435	416	-04	-11
Total citrus crates			28	28	35,299	39,552	+12	-04
Asparagus crates			1	1	70	70	0	+07
Beet crates			1	0	8	0	*	*
Cabbage crates			2	2	61	66	+08	-02
Cantaloupe crates		8x12x22			17	10	-41	0
"		standard			81	75	-07	0
"		not specified			212	212	0	0
Total cantaloupe crates			5	4	310	297	-04	0
Cauliflower crates			3	2	201	183	-09	-45
Celery crates			15	15	4,558	4,831	+06	-04

Table 1. - Production of wooden containers for fruit and vegetables
Southern Region - continued

Containers	Type	Size	Number of		Reported production		Percentage changes	
			manufacturers		1/		to	
			1942 : 1943	1944 :	1942 : 1943	1944 :	1942 : 1943	1943 : 1944
					Thousands of containers			
Corn crates			4	4	4	171	131	134
Irish potato crates		1 bu.	4	4	1	456	317	8
Lettuce crates		1A				100	100	100
"		1/2 1A & 1A				371	274	250
"		1/2 1A				1,414	1,295	1,090
Total lettuce crates			12	9	6	1,885	1,669	1,440
Pepper crates			11	10	8	1,133	719	400
Pineapple crates			4	2	1	302	125	100
Radish crates			3	2	2	125	110	110
Sweetpotato crates, nailed						390	590	633
Sweetpotato crates, wirebound						569	992	940
Total sweetpotato crates			10	14	14	959	1,582	1,573
Tomato crates			6	7	5	267	275	288
Tomato lugs		30 lb.	22	23	22	6,991	7,213	6,640
Vegetable crates			6	6	4	739	680	525
Till baskets		1,2,3,4, qt.	6	5	5	14,618	9,854	9,715
Climax baskets		2 - 12 qt.				304	228	400
"		4 qt.				1,394	1,474	1,450
"		12 qt.				109	22	22
Total climax baskets			4	4	4	1,807	1,724	1,872

Table 1. - Production of wooden containers for fruit and vegetables
Southern Region - continued

Type	Containers	Size	Number of manufacturers 1942 : 1943 : 1944	Reported production			Percentage changes		
				1942 :	1943 :	1944 :	1942 :	1943 :	1944 :
				Thousands of containers			to :	to :	to :
				1942 :	1943 :	1944 :	1942 :	1943 :	1944 :
Market baskets		1 bu.		540	444	400	- 18	- 10	- 26
"		12 qt.		108	192	312	+ 78	+ 63	+189
"		1/2 bu.		979	769	874	- 21	+ 14	- 11
"		8 qt.		136	200	198	+ 47	- 01	+ 46
Total market baskets			13	1,763	1,605	1,784	- 09	+ 11	+ 01
R. S. Baskets		1 bu.		24,568	24,748	24,980	+ 01	+ 01	+ 02
R. S. "		1/2 bu.		2,038	1,317	1,323	- 37	2/	- 37
Total R. S. baskets:		3/	19	26,656	26,065	26,303	- 02	+ 01	- 01
Berry cups		1 pt.		3,424	874	1,250	- 74	+ 43	- 63
"		1 qt.		106,475	74,663	80,100	- 30	+ 07	- 25
Total berry cups			11	109,899	75,537	81,350	- 31	+ 08	- 26
Berry crates		24 pt.		7	68	60	+871	- 12	+757
"		36 pt.		810	623	610	- 23	- 02	- 25
"		24 qt.		1,972	1,207	1,393	- 39	+ 15	- 29
"		16 qt.		20	20	20	0	0	0
"		12 qt.		75	65	0	- 13	*	*
Total berry crates			18	2,884	1,983	2,083	- 31	+ 05	- 28
Hampers		48 qt.		802	86	0	- 89	*	*
"		1 bu.		23,227	22,721	22,059	- 02	- 03	- 05
"		20 & 24 qt.		3,473	3,888	3,860	+ 12	- 01	+ 11
Total hampers			21	27,502	26,695	25,919	- 03	- 03	- 06
Total				241,974	204,521	206,775	- 15	+ 01	- 15

1/ Estimated production 1944

2/ Less than 1%

3/ Includes export tubs. Two concerns not included subsequently reported a combined production of one million for 1944.

Table 2.- Capacity of manufactured containers by types
Southern Region

Containers	Number of manufacturers			Equivalent capacity in 500 bushel units					Percentage changes				
	1942	1943	1944	1942	1943	1944	1944	1944	1942 to 1943	1943 to 1944	1942 to 1944	1943 to 1944	1944 to 1944
Apple barrels	1	1	1	134	42	302	1	1	- 69	+619	+125		
Apple boxes	11	12	10	6,972	6,844	6,796	1	1	- 02	- 01	- 03		
Avocado crates	1	1	1	20	8	8	1	1	- 60	0	- 60		
Banana crates	1	1	1	240	300	300	1	1	+ 25	0	+ 25		
Citrus crates	28	28	27	110,976	124,536	119,956	1	1	+ 12	- 04	+ 08		
Asparagus crates	1	1	1	126	126	136	1	1	0	+ 07	+ 08		
Beet crates	1	0	0	40	0	0	1	1	*	*	*		
Cabbage crates	2	2	2	306	230	326	1	1	+ 08	- 02	+ 07		
Cantaloupe crates	5	4	4	696	664	664	1	1	- 05	0	- 05		
Cauliflower crates	3	2	1	648	590	323	1	1	- 09	- 45	- 50		
Celery crates	15	15	13	18,232	19,324	18,540	1	1	+ 06	- 04	+ 02		
Corn crates	4	4	4	510	390	400	1	1	- 24	+ 03	- 22		
Irish potato crates	4	4	1	912	634	16	1	1	- 30	- 97	- 98		
Lettuce crates	12	9	6	5,276	4,654	4,058	1	1	- 12	- 13	- 23		
Pepper crates	11	10	8	3,400	2,158	1,200	1	1	- 37	- 44	- 65		
Pineapple crates	4	2	1	804	332	266	1	1	- 59	- 20	- 67		

Table 2.- Capacity of manufactured containers by types
Southern Region- continued

Containers	Number of manufacturers		Equivalent capacity in 500 bushel units		Percentage changes			
					1942 : 1943		1943 : 1944	
	1942	1943	1942	1943	to	to	to	to
	1942	1943	1942	1943	1943	1944	1944	1944
Radish crates	3	2	250	220	220	0	- 12	- 12
Sweetpotato crates	10	14	1,918	3,164	3,146	+ 65	- 01	+ 64
Tomato crates	6	7	534	550	576	+ 03	+ 05	+ 08
Tomato lugs	22	23	6,990	7,214	6,640	+ 03	- 08	- 05
Vegetable crates	6	6	1,848	1,700	1,313	- 08	- 23	- 29
Till baskets	6	5	2,284	1,540	1,518	- 33	- 01	- 34
Climax baskets	4	4	544	570	528	- 14	+ 12	- 03
Market baskets	13	14	2,210	1,900	2,006	- 14	+ 06	- 09
R. S. baskets ^{3/}	19	19	51,224	50,812	51,284	- 01	+ 01	<u>2/</u>
Berry cups	11	11	6,762	4,694	5,406	- 31	+ 15	- 20
Hampers	21	23	53,636	51,046	49,426	- 05	- 03	- 08
Total			277,492	284,242	275,354	+ 02	- 03	- 01

1/ Estimated

2/ Less than 1%

3/ Includes export tubs

The following arrangement of eight containers in order of their total capacity indicated for 1944, also showing the estimated numbers to be manufactured, reveals the relative importance of the leading containers manufactured in the Southern Region:

	Capacity (in 500 bu. units)	Numbers (in thousands)
Citrus crates	119,956	38,119
R. S. baskets and export tubs	51,284	26,303
Hampers	49,426	25,919
Celery crates	18,540	4,635
Apple boxes	6,796	3,105
Tomato lugs	6,640	6,640
Berry cups	5,406	81,350
Lettuce crates	4,058	1,440

The number and type of manufactured containers by individual states is given in individual state tables in Appendix I. A directory of manufacturers is given in Appendix II.

Comparison of Shipments of Fruits and Vegetables
With Estimates of Capacities of Containers Manufactured

Because the production of apples and peaches in the Southern Region in 1943 was abnormally low and the production of citrus in the season 1942-43 was the largest on record, it was decided to use the shipments in 1942 of apples, peaches, and vegetables, and the season of 1941-42 for citrus in comparing container production with fruit and vegetable shipments, and in appraising the container needs of the present season.

Regional rail and boat carlot shipments in the 1941-42 season were:

Citrus	77,625 ^{1/}
Peaches	12,681 ^{2/}
Apples	6,641 ^{2/}
All vegetables ^{3/}	<u>72,051 ^{2/}</u>
Total	168,998 carlots

^{1/} Marketing Florida Citrus, Annual Report, F.D.A., October, 1943.

^{2/} Annual Report, Carlot Shipments of Fruits and Vegetables for 1942, A.M.S.

^{3/} Including both sweet and Irish potatoes, but not watermelons.

The United States movement of fresh fruits and vegetables was indicated to be 40.7 percent by motor trucks in 1942.^{1/} For this Region it is assumed that truck movements were 40 percent, although it is believed that this percentage is too high. Using this percentage results in a calculated total of 281,633 equivalent carlots.

The calculated capacity of manufactured containers in 500 bushel units for 1942, as indicated in Table 2, was 281,444, a figure closely approximating the calculated shipments. This coincidental agreement was not anticipated because of the incompleteness of the survey data, not all shipped commodities were packed in wooden containers, and there is considerable interregional in-and-out shipment of containers.

Type and Status of Container Manufacturing Plants

In Table 3, 198 manufacturing plants, including 32 defunct ones, are classified by types of production, and the number and location by states is shown. It will be noted that slightly less than one-half of the plants surveyed were found to be manufacturing fruit and vegetable containers; that 32, or about 16 percent, were no longer operating. These findings indicate that available lists by states of container manufacturers were inadequate. Although a few plants had discontinued business within the past year or two, the majority had, it appears, ceased to operate several years previously, although definite information on the dates of discontinuance is not available. It is probable that several additional small concerns exist or have suspended business, but are unaccounted for here. No attempt was made to list or get data on all veneer manufacturers; however, a large portion of the group in this table indicated as producing industrial or other containers or veneer are veneer manufacturers. Unpublished data provided by the U. S. Forest Service indicate that about 62 percent of the approximately 2 billion square feet of the container veneer produced in the Region in 1943 was produced in the three states, Florida, Mississippi, and Georgia.

Production Limitations

Comments made by manufacturers on factors which limit production are shown in Table 4. It will be noted that labor problems were the outstanding difficulty. Eighty concerns commented on this problem, 71 of them indicated a difficult labor situation; 9 indicating a fair situation. Some additional concerns had closed on account of scarcity of labor. A number stated that absenteeism and inefficiency, in addition to scarcity of labor, were problems.

^{1/} Marketing and Transportation Situation, November 1943, B.A.E.

Table 3.- Type, number, and distribution of container plants
Southern Region

Plants	Ala.	Fla.	Ga.	Ky.	Miss.	N. C.	S. C.	Tenn.	Va.	Region
Producing fruit and vegetable containers	4	27	11	2	7	13	9	10	9	92
Full time	(4)	(21)	(8)	(2)	(5)	(12)	(9)	(8)	(8)	(77)
Part time and government contracts	(0)	(6)	(3)	(0)	(2)	(1)	(0)	(2)	(1)	(15)
On government contracts full time	1	0	3	3	2	2	1	2	4	18
Producing industrial or other containers, or veneer	2	14	0	8	16	8	1	7	0	56
Out of business	6	12	1	0	3	7	2	1	0	32 ¹ / ₂
Total	13	53	15	13	28	30	13	20	13	198

¹/₂ Approximately sixty percent of these plants ceased operations prior to 1942.

Table 4.- Comments by manufacturers on production factors and limitations

Plants reporting			
Subject of Comment	Number	Percent	
OPERATION			
: Year-round	: 40	: 89	
: Seasonal	: 5	: 11	
: Total	: 45	: 100	
SHIFTS			
: Single	: 48	: 80	
: More than one	: 12	: 20	
: Total	: 60	: 100	
MACHINERY			
: Full use	: 24	: 67	
: Some idle	: 12	: 33	
: Total	: 36	: 100	
EQUIPMENT			
: Some new needed	: 11	: 39	
: Adequate	: 17	: 61	
: Total	: 28	: 100	
LABOR SITUATION			
: Fair	: 9	: 11	
: Difficult	: 71	: 89	
: Total	: 80	: 100	
WAR CONTRACTS			
: Limiting production	: 10	: 67	
: Not limiting production	: 5	: 33	
: Total	: 15	: 100	
SUPPLY OF RAW MATERIAL			
: Limiting production	: 30	: 63	
: Not limiting production	: 18	: 37	
: Total	: 48	: 100	

Of 48 plants giving information on supply of raw materials, 30 indicated that short supplies limited production. In many cases this included inability to get logs out of the woods because of labor shortages. In some cases where manufacturers were dependent on other concerns for veneer, war needs of veneer created a shortage of this material.

Of the 60 manufacturing plants reporting on the number of shifts worked, only 12 of these were working more than one shift. Of these 12, 2 were working 3 shifts, the remaining 10 were working two shifts for part of their operation. Many of the 48 concerns working one shift only indicated a desire but had little hopes of adding another shift because of labor difficulties. A few indicated that lack of orders limited expanded output.

Of the 15 concerns dividing their time between war contracts and fruit and vegetable containers, 10 indicated that war contracts were limiting their output of fruit and vegetable containers.

Incomplete information was obtained on the 18 concerns working wholly on war contracts and on the 32 who had gone out of business. However, the majority of both groups had previously made fruit and vegetable containers. A number of these concerns indicated that high priorities on materials and greater profits were associated with war materials.

Twenty-four reported full use of their machinery; 12 reported some idle machinery. Eleven stated that new equipment was needed, 17 indicated none needed.

Forty concerns indicated a year-round operation; only 5 stated specifically that they operated seasonally, but it seems evident that many of the smaller firms operate only in advance of and during the season of local demand for containers. A few indicated that when local farm work starts they expect to either reduce or stop production because of competition for labor.

Four manufacturers in Tennessee and one in Georgia indicated that price ceilings on containers are limiting production. One-bushel baskets, hampers, tomato lugs and nailed crates were types on which higher ceilings were desired. As this is written, Redesigned MPR-320 is announced which increases prices on a number of containers, but reduces the price on tomato lugs.

Source of Raw Materials

Of 65 concerns reporting use of veneer, 34 produced their total veneer needs; 9 purchased their total amount used; and each of the remaining 22 concerns produced and purchased varying percentages of veneer used

by them. Of the 34 concerns producing their total supply of veneer, 22 produced wholly from logs purchased from others, and 12 produced wholly from their own forests.

Of 67 concerns reporting use of lumber, 32 produced all lumber used by themselves; 12 purchased their total amount used; and each of the remaining 23 concerns produced and purchased varying percentages of lumber used by them. Of the 32 concerns producing their total supply of lumber, 17 produced wholly from logs purchased from others, and 15 produced wholly from their own forests.

This information should be of use in determining to whom and at what points additional labor should be made available for increased container production.

Prospects for the Present Season

As this is written, crop production estimates are unavailable, except for citrus and winter and spring truck crops.

If it is assumed that citrus shipments for the 1943-44 season will exceed those of 1941-42 by 12 percent, peach shipments for 1944 will exceed those of 1942 by 20 percent, and that apple and vegetable shipments will be the same in 1944 as in 1942, it would appear that about 9 percent more containers would be needed in 1944 than in 1942. Manufacturers have expressed an intent to produce 15 percent fewer containers, but with a capacity of only 1 percent less than in 1942. This expected production, however, was conditioned on sufficient labor and materials being available to produce this output. Inasmuch as 63 percent of the manufacturers indicate a shortage of raw materials and 89 percent were having labor difficulties, it would seem probable that the indicated production will not be met.

Citrus Fruits

Since Florida has now (March 1, 1944) moved the more perishable portion of its citrus crop, the early and mid-season varieties, a greater percentage of the remaining oranges, mostly Valencias, can be moved in bags because of their better carrying qualities. A far higher percentage of the grapefruit picked in the latter third of the season is processed than in the earlier portion of the season. An increasing percentage of the citrus crop is moved in the wirebound crate which lends itself readily to salvage, shipment, and reuse. For these reasons, it appears that the container situation for the present citrus shipping season is not critical and, with minor exceptions, principal needs will be met.

Peaches

It appears probable that because of the short peach crop last year approximately 400,000 baskets and tubs were held over in South Carolina and probably twice this amount in Georgia. ^{1/} It seems likely that baskets and tubs manufactured in South Carolina supplemented by this carryover will pretty well supply needs in that state. Manufacture and carryover in Georgia ^{2/} will not supply needs for a good crop there. North Carolina is a heavy producer of these containers, but a shortage of peach containers in the Region is anticipated, based on present crop prospects.

Apples

The manufacture of apple boxes, baskets, and tubs did not vary markedly in 1943 from 1942. Since the crop in 1943 was a very light one, it is likely that there is a considerable reserve of these containers, although no definite evidence of this has been received.* Estimated production of these containers in 1944 is approximately the same as for the two previous seasons. A small percentage of the apple crop is packed in barrels. A sharp increase in production of barrels is indicated for 1944.

Since the major portions of both peaches and apples of this Region are packed in baskets or tubs, and since these containers are also used for other fruits and many kinds of vegetables, it is extremely difficult to appraise the adequacy of the supply of these containers. Fortunately, however, baskets and tubs are readily "nested" and their salvage, storage and shipment for reuse should make possible a wide distribution of used containers of this type.

It is believed that the indicated manufacture, plus a vigorous salvage and reuse program, can provide adequate containers for this season's apple crop.

Vegetables

It is believed that more difficulties will be encountered in securing an adequate supply of containers for the shipment of fresh vegetables than with fruits.

^{1/} Based on correspondence.

^{2/} One large Georgia manufacturer of one-bushel and one-half bushel export tubs not covered in the survey was contacted after the tables of this survey were prepared. Output of this concern is estimated to be 200 thousand or more of each of the above sizes.

Hampers are used for the shipment of a large percentage of the volume and for a wide range of vegetables. The indicated manufacture of hampers is declining. It is probable that uncertainty over limitations on the use of wooden containers has resulted in retarding the placing of orders and the consequent manufacture of hampers and some additional containers in which vegetable crops named in Limitation Order L-232 are shipped.

A large percentage of commercial vegetables are produced and shipped by a large number of unorganized, relatively small, and scattered producers, with some notable exceptions, and this results in more difficult procurement of supplies. Since MPR-434 has no provision for a mark-up for more than one dealer, used container dealers in this Region cannot handle carlots of used containers from the northern terminal markets, the principal source, since the procurement there is chiefly through dealers. This means that the salvage and reuse program is not generally as effective with vegetable producers as with fruit producers who are in general better organized and do less individual marketing.

Rather drastic reduction in the manufacture of vegetable containers is indicated; for example, this reduction in capacity from 1942 to 1944 is shown in Table 2 as 65 percent for pepper crates, 50 percent for cauliflower crates, and 29 percent for vegetable crates. On the other hand, the tendency to use more crates in the shipment of sweet potatoes is indicated by a marked increase in the manufacture of sweetpotato crates.

Approximately 7 thousand acres of tomato plants are reported as being grown in Georgia this year for shipment northward. Formerly a large percentage of these were shipped in a slant-sided crate, reported to be no longer available. It is estimated that more than 100 thousand one-half bushel baskets will be required for this crop. A 37 percent decline in production from 1942 to 1944 is indicated for this container. A heavy use of used containers appears to be the only solution for these growers.

It has been generally reported that many million more wooden containers will be needed in the United States in 1944 than in 1943. It is believed that no increase in total number of wooden fruit and vegetable containers will be essential in the Southern Region in 1944, although more fruit containers will be needed if present prospects hold. The decrease in strawberry production, a crop which accounts for a large portion of the total number of containers, the greater use of mesh bags, and bulk shipments of cabbage, green corn, white potatoes and some other crops, and intensification of the reuse program should all result in a lessening essential use of new wooden containers.

Experience and knowledge gained through shortage-induced shipments of fruits and vegetables in fewer types of containers, used and unusual containers, and even in bulk, should be capitalized on and serve as a basis for further standardization of containers and economic handling of fruits and vegetables in peace times.

The Salvage and Reuse Program

Commercial producers of fruits and vegetables are getting only a very minor percentage of their containers from local civilian salvage programs. There is evidently not sufficient financial inducement to spur used container dealers to do the collecting from retailers, recondition, warehouse and sell these containers.

For local salvage programs in wooden containers to become effective, it is believed that it will be necessary for wholesalers and retailers to voluntarily agree that no fruits and vegetables will be delivered in wooden containers to retailers unless then and there a given minimum percentage, say 50 percent, of similar wooden containers are collected by the wholesaler, for which a minimum financial credit is given. This should occasion no great hardship, would make it feasible for used container dealers to collect from wholesalers, and a worthwhile wood conservation program could result which would not necessarily end with the war. This unnecessary, serious depletion of United States forests could be markedly lessened.

A January 1944 report from 54 Army stations in 7 southeastern states indicated 32,000 fruit and vegetable containers on hand at the end of the month, 27,000 sold during the month at an average price of 5 cents each. This report covers only a fraction of all Army stations in the 7 states and no stations of other military branches. It is estimated that containers salvaged from all military posts in the Southern Region provide wooden fruit and vegetable containers for the shipment of from 100 to 150 cars of fruits and vegetables monthly, or perhaps one-half of 1 percent of the average monthly movement of fruits and vegetables.

Doubtless the greatest source of used containers is the used container dealer in northern terminal markets who ships in carlots to shippers of fruits and vegetables. This has been made possible by the greatly reduced freight rates on these containers. The difficulties which small producers encounter in securing packages from this source have already been mentioned. Great credit is due chain stores for the aggressive action they have taken in salvaging and placing into reuse fruit and vegetable containers.

In the fall of 1943 a start was made toward purchasing and reselling used containers by the Food Distribution Administration as a service to fruit and vegetable producers and shippers. Before the program proceeded far, however, it became apparent that a rather large revolving fund and considerable personnel would be necessary to properly carry out such a program. Then too, it was not, perhaps, consistent to encourage the establishment of used container dealers and at the same time engage in this marketing function. It was, therefore, administratively determined that the Food Distribution Administration could best serve by instituting an informational service or clearing house through which buyer and seller would be brought together. This service has resulted in the ultimate sale of a large but undetermined number of carloads of used containers in the Southern Region.

APPENDIX I

State Tables on Production of Wooden Containers
for
Fruits and Vegetables

SOUTHERN REGION

War Food Administration
Office of Distribution
Atlanta, Georgia

March 1944

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY FOUR PLANTS IN ALABAMA

Containers		:	:	Production		Percentage Changes			
		:	Number	:		:	1942	1943	1942
		:	of	:		:	to	to	to
Type	Size	:	Concerns	:	1942	1943	1944	1943	1944
(thousands)									
Apple Boxes	1-1/8 bu.	:	2	:	600	575	625	- 4	+ 9
Avocado Crates		:	1	:	25	10	10	- 60	0
Celery Crates, nailed		:	2	:	375	625	575	+ 67	- 8
Lettuce Crates	7-1/2x16x19	:	1	:	850	550	600	- 35	+ 9
Pepper Crates	1-5/8 bu.	:	1	:	50	25	25	- 50	0
Pineapple Crates	10-1/2x12x33	:	1	:	150	25	-	- 83	-
Radish Crates		:	2	:	55	40	40	- 27	0
Sweet Potato Crates, nailed		:	3	:	180	183	233	+ 2	+ 28
Sweet Potato Crates, wirebound		:	1	:	-	45	50	-	+ 11
Tomato lugs		:	1	:	150	40	50	- 73	+ 25
Till Baskets	4 qt.	:	1	:	5	-	-	-	-
Market Baskets	12 qt.	:	1	:	-	120	192	-	+ 60
Berry Cups	1 qt.	:	1	:	-	720	1,200	-	+ 67
Berry Crates	24 qt.	:	3	:	100	160	208	+ 60	+ 30
Berry Crates	16 qt.	:	1	:	20	20	20	0	0
TOTAL			4	:	2,560	3,138	3,828	+ 23	+ 22

NOTE: Of 23 listed manufacturers, reports were made on only 13. Six of these were no longer in business, one is wholly on government contracts and interviewer failed to get data from one operating concern, one is making only boxes for dressed poultry, another is making only box stocks. Schedules obtained on 4.

Possible Increased Production and Limitations: Two of three concerns reporting indicated possible increase in 1944 of 20-50% conditional on increased labor supplies in both woods and mills and some additional equipment.

Source of Raw Material: One hundred percent of logs or lumber purchased from others.

Type of Operation	No. of Concerns	
1. Spending full time on fruit and vegetable containers	4	
2. Spending part time on government orders and part on fruit and vegetable containers ^{2/}	-	4
3. Spending full time on government contracts	1	
4. Out of business	6	7
5. Industrial containers, veneer, etc.	2	2
TOTAL		13

^{1/} Estimated 1944 production

^{2/} Records not complete

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY TWENTY-SEVEN PLANTS IN FLORIDA

Containers		:	:	Production			Percentage Changes		
		:	Number	:	:	:	1942	1943	1944
		:	of	:	:	:	1/	to	to
Type	Size	:	Concerns	:	1942	1943	1944	1943	1944
(thousands)									
Apple Boxes	1-1/8 bu.	:	1	:	145	114	200	- 21	+ 75
Citrus Crates, nailed	1-3/5 bu.	:	7	:	8,113	8,832	7,366	+ 9	- 17
"	"	:	"	:	4/5 bu.	5	653	653	797
"	"	:	"	:	14	19,880	22,037	22,646	+ 11
"	"	:	"	:	4/5 bu.	4	435	416	370
"	"	:	"	:	2	15	40	84	+167
"	"	:	"	:	1	25	25	25	0
Cantaloupe Crates		:	1	:	25	25	25	0	0
Celery Crates		:	5	:	3,228	3,330	3,300	+ 03	- 01
Irish Potato Crates	1 bu.	:	3	:	358	291	0	- 19	-
Lettuce Crates	LA & 1/2 LA	:	3	:	151	50	0	- 67	-
Pepper Crates		:	8	:	980	591	275	- 40	- 53
Tomato Field Crates		:	6	:	256	224	199	- 12	- 11
Tomato Lugs		:	7	:	4,492	4,318	3,615	- 04	- 16
Tomato Carrier Shells		:	1	:	15	3	0	- 80	-
Vegetable Crates		:	1	:	190	146	0	- 23	-
R. S. Baskets 2/	1 bu.	:	3	:	147	29	25	- 80	- 14
Berry Cups	1 pt.	:	2	:	3,174	674	1,000	- 79	+ 48
Berry Crates	36 pt.	:	3	:	160	123	110	- 23	- 11
Hampers	32 qt.	:	10	:	4,850	6,850	7,153	+ 41	+ 04
"	48 qt.	:	3	:	802	86	0	- 89	-
"	24 qt.	:	1	:	75	0	0	-	0
Pineapple Crates		:	1	:	2	0	0	-	0
TOTAL			27	:	48,146	48,832	47,165	+ 01	- 03

NOTE: Reports were received on 53 concerns in Florida. The activities of these concerns are listed as follows:

Type of Operation	No. of Concerns	
1. Spending full time on fruit and vegetable containers	21	
2. Spending part time on government contracts and part on fruit and vegetable containers	6	27
3. Producing industrial containers, veneer, etc.		14
4. Out of business (7 of these concerns were making fruit and vegetable containers before they ceased operations)		12
TOTAL	53	

1/ Estimated 1944 production

2/ Includes export tubs

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY ELEVEN PLANTS IN GEORGIA

Containers		:	:	:	:	Percentage Changes		
						1942	1943	1944
Type	Size	Concerns	1942	1943	1944	1942	1943	1944
(thousands)								
Apple Boxes	1 bu.	2	260	365	100	+ 40	- 73	- 62
Citrus Crates, nailed	4/5 "	2	150	200	100	+ 33	- 50	- 33
" " "	1-3/5 "	3	550	850	350	+ 55	- 59	- 37
" " wirebound	1-3/5 "	3	4,718	5,214	5,290	+ 11	+ 01	+ 12
Cantaloupe Crates		2	48	35	35	- 27	0	- 27
Cauliflower Crates	23x14-1/2x12-7/8	1	83	83	0	0	-	-
Celery Crates		4	642	634	500	- 01	- 21	- 22
Corn Crates	12x12x22	11	50	0	0	-	-	-
Lettuce Crates	1/2 LA	4	394	545	290	+ 38	- 47	- 26
Pepper Crates	11x13-1/2x22	2	103	103	100	0	- 03	- 03
Sweet Potato Crates, nailed	1 bu.	2	10	57	0	+470	-	-
Tomato Crates		3	236	268	288	+ 14	+ 07	+ 22
Tomato Field Crates		1	31	7	0	- 77	-	-
Tomato Lugs		3	150	269	390	+ 79	+ 45	+160
Vegetable Crates	15x12x12	1	114	12	0	- 89	-	-
Market Baskets	8 qt.	2	136	200	198	+ 47	- 01	+ 46
" " "	12 "	1	108	72	120	- 33	+ 67	+ 11
" " "	16 "	1	24	24	24	0	0	0
R. S. Baskets	1/2 bu. 2/	2	2,088	1,317	1,323	- 37	0	- 37
R. S. Baskets	1 bu. 2/	2	454	448	460	- 01	+ 03	+ 01
Berry Cups	1 qt.	1	1,000	800	1,000	- 20	+ 25	0
" " "	1 pt.	1	250	200	250	- 20	+ 25	0
Berry Crates	24 qt.	2	235	235	235	0	0	0
Hampers	1 bu.	2	975	600	600	- 38	0	- 38
"	5/8 "	1	641	860	860	+ 34	0	+ 34
TOTAL		11	13,450	13,398	12,513	0	- 07	- 07

NOTE: There were 18 container manufacturers in this state prior to the war. Fifteen concerns were interviewed and it is understood that 2 out of 3 that were not contacted are on government contracts full time. The concerns contacted are classified as follows:

Type of Operation	No. of Concerns	
1. Spending full time on fruit and vegetable containers	8	
2. Spending part time on government contracts and part on fruit and vegetable containers	3	11
3. Spending full time on government contracts	3	
4. Out of business (ceased operating July 1943)	1	4
TOTAL	15	

1/ Estimated production in 1944

2/ Includes export tubs. 400,000 additional export tubs by one manufacturer not included.

PRODUCTION OF WOODEN CONTAINERS FOR FRUITS AND VEGETABLES
BY TWO PLANTS IN KENTUCKY

Containers		:	:	Production			: Percentage changes		
		:	Number	:	:	:	1942	1943	1942
		:	of	:	:	1/	to	to	to
Type	Size	:	Concerns	:	1942	1943	1944	1943	1944
(thousands)									
Climax Baskets	4 qt.	:	1	:	419	803	800	+ 92	0
" "	12 "	:	1	:	97	20	20	- 70	0
Market Baskets	1 bu.	:	1	:	540	444	400	- 18	- 10
" "	1/2 "	:	1	:	204	77	90	- 63	+ 17
R. S. Baskets	1 "	:	1	:	164	180	216	+ 10	+ 20
Berry Cups	1 qt.	:	1	:	600	2,300	2,000	+283	- 13
Berry Crates	24 pt.	:	1	:	7	68	60	+871	- 12
" "	24 qt.	:	1	:	406	136	130	- 67	- 4
TOTAL		:	2	:	2,437	4,028	3,716	+ 65	- 8

NOTE: Reports were received on 13 concerns. Their operation is listed as follows:

Type of Operation	No. of Concerns	
1. Spending full time on fruit and vegetable containers	2	2
2. Spending full time on government contracts	3	
3. Manufacturing industrial and other types of containers	8	11
TOTAL		13

^{1/} Estimated production for 1944

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY SEVEN PLANTS IN MISSISSIPPI

Containers		: Number :	Production			: Percentage Changes		
		: of :				: 1942 : 1943 : 1944		
Type	Size	: Concerns :	1942	1943	1944	1943	1944	1944
(thousands)								
Apple Boxes	11x13x17	1	200	200	200	0	0	0
Citrus Field Boxes		1	100	100	100	0	0	0
Citrus Crates, wirebound	1-3/5 bu.	3	800	1,350	1,200	+ 69	- 11	+ 50
Cabbage Crates, nailed	100 lb.	1	5	4	5	- 20	+ 25	0
Cauliflower Crates	80 lb.	1	100	100	100	0	0	0
Celery Crates		3	298	242	260	- 19	+ 07	- 13
Corn Crates		1	100	100	100	0	0	0
Lettuce Crates	LA	1	100	100	100	0	0	0
Pineapple Crates		1	100	100	100	0	0	0
Sweet Potato Crates, nailed		2	100	250	300	+150	+ 20	+200
" " " wirebound		3	450	500	600	+ 11	+ 20	+ 33
Tomato Lugs	30 lb.	5	706	1,055	905	+ 49	- 14	+ 28
Vegetable Crates		2	150	150	150	0	0	0
Till Baskets		1	900	1,100	700	+ 22	- 36	- 22
Berry Crates	36 pt.	1	650	500	500	- 23	0	- 23
Hampers	32 qt.	3	719	1,124	1,050	+ 56	- 07	+ 46
TOTAL		7	5,478	6,975	6,370	+ 27	- 09	+ 16

NOTE: Reports were received from 28 concerns in Mississippi. The operation of these concerns is listed as follows:

<u>Type of Operation</u>	<u>No. of Concerns</u>	
1. Spending full time on fruit and vegetable containers	5	
2. Spending part time on government contracts and part on fruit and vegetable containers	2	7
3. Spending full time on government contracts	2	
4. Out of business	3	
5. Producing industrial containers, veneer, etc.	16	21
TOTAL		28

1/ Estimated 1944 production

PRODUCTION OF WOODEN CONTAINERS FOR FRUITS AND VEGETABLES
BY THIRTEEN PLANTS IN NORTH CAROLINA

Containers		:	:	Production			Percentage Changes		
		:	Number	:		:	1942	1943	1944
Type	Size	:	of	:		1/	to	to	to
		:	Concerns	:			1943	1944	1944
(thousands)									
Apple Boxes	1-1/8 bu.	:	1	:	1,320	1,320	1,320	0	0
Cantaloupe Crates		:	1	:	212	212	212	0	0
Corn Crates		:	4	:	21	31	34	+ 48	+ 10
Lettuce Crates	LA	:	1	:	10	0	0	-	-
Sweet Potato Crates, nailed	1 bu.	:	1	:	75	75	75	0	0
Tomato Lugs	30 lb.	:	1	:	450	450	450	0	0
Climax Baskets	4 qt.	:	1	:	975	671	650	- 31	- 03
" "	12 "	:	1	:	12	2	2	- 83	0
R. S. Baskets ^{2/}	1 bu.	:	4	:	15,027	14,619	14,410	- 03	- 01
Berry Cups	1 qt.	:	3	:	3,875	2,775	3,250	- 28	+ 17
Berry Crates	24 qt.	:	4	:	370	287	175	- 22	- 39
Hampers	32 qt.	:	3	:	6,504	6,204	6,004	- 05	- 03
"	5/8 bu.	:	1	:	1,759	1,700	1,700	- 03	0
TOTAL			13		30,610	28,346	28,282	- 07	0

NOTE: Reports were received from 30 concerns in North Carolina. The operation of these firms are listed as follows:

Type of Operation	No. of Concerns	
1. Spending full time in production of fruit and vegetable containers	12	
2. Spending part time on government contracts and part on fruit and vegetable containers	1	13
3. Spending full time on government contracts	2	
4. Producing industrial and other packages	8	
5. Out of business	7	17
TOTAL		30

^{1/} Estimated production for 1944

^{2/} Includes export tubs

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY NINE PLANTS IN SOUTH CAROLINA

Containers		:	Number	:	Production			:	Percentage Changes		
		:	of	:	:	:	1/	:	1942:	1943	1942
Type	Size	:	Concerns	:	1942	:	1943	:	1943:	1944	to
(thousands)											
Apple Boxes	1 bu.	:	1	:	300	:	280	:	300	- 7	+ 7
Banana Cases	standard	:	1	:	60	:	75	:	75	+ 25	0
Asparagus Crates		:	2	:	70	:	70	:	75	0	+ 7
Cantaloupe Crates		:	1	:	25	:	25	:	25	0	0
Lettuce Crates	1/2 L.	:	1	:	170	:	200	:	200	+ 18	0
Potato Boxes	1 bu.	:	1	:	8	:	8	:	8	0	0
Radish Crates		:	1	:	70	:	70	:	70	0	0
Tomato Lugs	standard	:	2	:	360	:	385	:	385	+ 7	0
Vegetable Crates	9x13x22	:	1	:	200	:	250	:	250	+ 25	0
Till Baskets		:	1	:	5	:	5	:	5	0	0
Market Baskets	16 qt.	:	3	:	390	:	390	:	390	0	0
R. S. Baskets ^{2/}	1 bu.	:	3	:	3,270	:	3,385	:	3,405	+ 4	+ 1
Berry Cups	1 qt.	:	1	:	50	:	50	:	50	0	0
Hampers	32 "	:	5	:	8,305	:	4,719	:	3,735	- 43	- 21
TOTAL			9	:	13,283	:	9,912	:	8,973	- 25	- 9

NOTE: Reports were received from 13 concerns; their operations are listed as follows:

Type of Operation	No. of Concerns	
1. Spending full time on fruit and vegetable containers		9
2. Spending full time on government contracts	1	
3. Out of business	2	
4. Manufacturing industrial containers	1	4
TOTAL		13

Four of the above records were obtained from WPB Schedules.

^{1/} Estimated production for 1944

^{2/} Includes vegetable tubs

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY TEN CONCERNS IN TENNESSEE

Containers		:	:	:			Percentage Changes						
		:	Number	:	Production		:	1942	:	1943	:	1942	
		:	of	:	:	:	:	1/	:	to	:	to	
Type	Size	:	Concerns	:	1942	:	1943	:	1944	:	1943	:	1944
(thousands)													
Cabbage Crates			1		56		62		60		+ 11		- 03
Sweet Potato Crates, nailed	1 bu.		1		25		25		25		0		0
Sweet Potato Crates, wirebound	1 "		3		119		447		290		+276		- 35
Tomato Lugs, standard	30 lb.		4		683		696		845		+ 2		+ 21
Till Baskets	2 & 4 qt.		1		17		8		10		- 53		+ 25
Market Baskets	16 "		3		192		161		245		- 16		+ 52
R. S. Baskets <u>2/</u>	1 bu.		3		636		1,002		1,050		+ 58		+ 05
Berry Cups	1 qt.		3		21,098		13,395		15,600		- 37		+ 16
Berry Crates	24 "		5		854		389		645		- 54		+ 66
Hampers	32 "		5		512		1,267		1,317		+147		+ 04
"	5/8 bu.		2		998		1,328		1,300		+ 32		- 02
TOTAL			10		25,190		18,780		21,387		- 25		+ 14

NOTE: Reports were received on 23 concerns in Tennessee. Their operations are classified as follows;

Type of Operation	No. of Concerns	
1. Spending full time on production of fruit and vegetable containers ;	8	
2. Spending part time on government contracts and part on fruit and vegetable containers	2	10
3. Spending full time on government contracts	2	
4. Manufacturing industrial or other types of containers	7	
5. Out of business	1	
6. Reports not complete	3	13
TOTAL		23

^{1/} Estimated 1944 production

^{2/} Includes export tubs. 700,000 additional export tubs by one manufacturer not included.

PRODUCTION OF WOODEN CONTAINERS FOR FRUIT AND VEGETABLES
BY NINE PLANTS IN VIRGINIA

Containers		:	:	:	:	Percentage Changes		
						1942	1943	1944
Type	Size	of	Concerns	1942	1943	1944	to 1943	to 1944
(thousands)								
Apple Barrels	1 bu.	1	22	7	50	-218	+614	+127
Apple Boxes		4	378	292	360	- 23	+ 23	- 5
Apple Field Crates		2	120	49	100	- 59	+104	- 17
Citrus Field Boxes		1	0	10	0	-	-	-
Beet Crates		1	8	0	0	-	-	-
Cantaloupe Crates		1	0	179	0	-	-	-
Cauliflower Crates		1	18	0	0	-	-	-
Celery Crates		1	15	0	0	-	-	-
Irish Potato Crates		1	90	18	0	- 80	-	-
Lettuce Crates		1	210	224	250	+ 7	+ 12	+ 19
Pineapple Crates		1	50	0	0	-	-	-
Tomato Field Baskets		1	1,038	703	700	- 32	0	- 33
Vegetable Crates, wirebound		1	85	122	125	+ 44	+ 2	+ 47
Till Baskets		2	13,691	8,741	9,000	- 36	+ 3	- 34
Climax Baskets		1	304	228	400	- 25	+ 75	+ 32
Market Baskets		1	169	117	125	- 31	+ 7	- 26
R. S. Baskets ^{2/}	1 bu.	4	4,870	5,085	5,414	+ 4	+ 6	+ 11
Berry Cups	1 qt.	2	79,852	54,623	57,000	- 32	+ 4	- 29
Berry Crates		2	82	65	0	- 21	-	-
Hampers	1 bu.	2	1,362	1,957	2,200	+ 44	+ 12	+ 62
TOTAL			9	102,364	72,420	75,724	- 29	+ 5

NOTE: One of the above firms did not produce any fruit and vegetable containers in 1943 because they had a government contract, but will produce in 1944, and they now have several large orders to fill in apple boxes. Thirteen reports were received and they are classified as follows:

Type of Operation	No. of Concerns	
1. Spending full time on fruit and vegetable containers	8	
2. Spending part time on government contracts and part on fruit and vegetable containers	1	9
3. Spending full time on government contracts	4	
TOTAL	13	

^{1/} Estimated production in 1944

^{2/} Includes export tubs

APPENDIX II

List of Manufacturers of Fruit and Vegetable Wooden Containers (Including a list of container veneer producers)

This list does not purport to be complete; no discrimination is intended and no guarantee of reliability is implied.

SOUTHERN REGION

War Food Administration
Office of Distribution
Atlanta, Georgia

March 1944

CODE SYMBOLS
for
FRUIT AND VEGETABLE WOODEN CONTAINERS

BASKETS

Climax A
Market B
Round Stave and Tubs . . . C
Till D

BARRELS

Apple E
Potato F

BOXES

Apple G

CRATES

Asparagus H
Avocado. I
Banana J
Beet K
Berry L
Cabbage M
Cantaloupe &
Cauliflower. N
Celery
Wirebound O₁
Nailed O₂
Unspecified. O_x

CRATES (continued)

Citrus
Wirebound P₁
Nailed. P₂
Unspecified P_x
Corn. Q
Lettuce R
Pepper. S
Pineapple T
Potato
Irish U
Sweet, wirebound. . . . U₁
Sweet, nailed U₂
Sweet, unspecified . . . U_x
Radish V
Tomato W
Lugs W₁
Vegetable. X

CUPS

Berry. Y

HAMPERS Z

DIRECTORY OF MANUFACTURERS
OF WOODEN CONTAINERS FOR FRUITS AND VEGETABLES
SOUTHERN REGION - 1943

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u>		
		<u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
ALABAMA				
Decatur Basket & Crate Co.	Decatur	G L O ₂ U ₂ V	G L O ₂ U ₂ V	G L O ₂ U ₂ V
E. Malchow Crate Firm	Cullman		L U ₁ Y	L U ₁ Y
T. R. Miller Mill Co. *	Brewton		U	
Jacob Shaffer	Cullman, Rt. 8		B L U _x	B L U _x
Troy Veneer and Crate Co.	Troy	D G I L O _x R S U ₂ V	G I L O _x R S U ₂	G I L O _x R S U ₂
* Production figures not reported		W ₁	W ₁	W ₁
FLORIDA				
Adkins Manufacturing Co.	Gainesville	C P ₁ Z	P ₁ Z	
Consumers Lumber & Mfg. Co.	Apopka	P ₁	P ₁	P ₁
Cummer Sons Cypress Co. (Plants at Lacoochee & Otter Creek)	Jacksonville	G P ₁ U ₁ X	G P ₁ U ₁ X	G P ₁
D & F Crate Works	Winter Haven		D	

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u>		
		<u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
FLORIDA (continued)				
Elberta Crate & Box Co.	Tallahassee	P ₁ P ₂	P ₁ P ₁ W ₁ Z	
Florida All-Bound Box Co.	Auburndale	O ₁ P ₁	O ₁ P ₁	O ₁ P ₁
Franklin Lumber & Basket Co.	Micanopy	Z	Z	Z
P. B. Goethe	Mt. Dora	Z	Z	Z
Great Southern Box Co.	Orlando	P ₁	P ₁	P ₁
Greenville Veneer & Crate Co.	Greenville	L O ₂ P ₂ S ₂ U	O ₂ P ₂ S ₂ U	O ₂ P ₂ S ₂
Highland Crate Co.	Bonifay	P ₁	P ₁	P ₁
Irvine Crate & Basket Co.	Irvine	P ₂ S ₂ U ₂ W ₁ Z &	P ₂ S ₂ Z &	P ₂ S ₂ Z &
Jacksonville Crate Co.	Jacksonville	P ₁	P ₁	P ₁
Keysville Lumber Co.	Keysville		L P ₂ S ₂ W ₁ Y Z	L P ₂ S ₂ W ₁ Z
Manatee Crate Co.	Manatee		O ₁ P ₁ P ₂ R ₂ S W ₁ Z	O ₁ P ₁ Z

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u> <u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
FLORIDA (continued)				
Nants Mfg. Co.	Live Oak	C Z	C Z	C Z
Nocatee Manatee Crate Co.	Nocatee and Callahan		P ₁ P ₂ R S W ₁	P ₁ P ₂ S W ₁
Ocala Mfg. Ice & Package Co.	Ocala	C O ₁ P ₁ P ₂ S ² V W ₁ Z ¹ &	C O ₁ P ₁ P ₂ S ² V W ₁ Z ¹ &	 P ₂ W ₁ Z
Revell Mfg. Co.	Wauchula	L S Y	L Y W ₁	L Y W ₁
Russ Crate Co.	Coleman	P ₂ Z ²	P ₂ Z ²	P ₂ Z ²
St. Johns Box Co.	Palatka	P ₁	P ₁	P ₁
S. O. Shinholser Crate Mill	Sanford	O ₁ P ₁ ¹	O ₁ P ₁ ¹	O ₁ P ₁ ¹
Walling Crate Co.	Leesburg	P ₁	P ₁	P ₁
GEORGIA				
J. W. & A. E. Coleman	Fayetteville, Rt. 2 B		B	B V
Coleman Bros.	College Park, Rt. 2 B	V W ₁	B V W ₁	B V W ₁
Dayton Veneer & Lumber Mill	Americus	C Z	C Z	C Z

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u> <u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
GEORGIA (continued)				
Elberta Crate & Box Co.	Bainbridge		G N R S	
J. L. Gibson	Red Oak	B Z	B Z	B
Georgia Crate & Basket Co.	Thomasville	O ₁ P ₁ P ₁ Z ²	O ₁ P ₁ P ₁ Z ²	O ₁ P ₁ P ₁ Z ²
Gray Basket Co.	Union City	B V W ₁	B V W ₁	B V W ₁
Menlo Fruit Packing	Menlo	D L Y	D L Y	D L Y
Pearson Basket Mills	Ft. Valley	C	C	C
The Pierpont Mfg. Co.	Savannah	O ₁ P ₁ R W ₁ X Z &	O ₁ P ₁ R U ₁ W ₁ X	P ₁ W ₁
Prinsho Veneer Co.	Valdosta	L O ₂ P ₂ Q ₂ R S X &	L O ₂ P ₂ R S X &	L O ₂ P ₂ R S X &
Southern Crate & Veneer Co.	Macon	C O ₂ P ₁ P ₂ R ² U ₂	C G O ₂ P ₁ P ₂ R ²	C G O ₂ P ₁ R

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u>		
		<u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
KENTUCKY				
New Albany Box & Basket Co.	Louisville	B C	B C	B C
Paducah Box & Basket Co.	Paducah	A B L Y	A B L Y	A B L Y
MISSISSIPPI				
Green Lumber Co.	Laurel	G N O ₂ Q R T U ₂ X &	G N O ₂ Q R T U ₂ X &	G N O ₂ Q R T U ₂ X &
Hazelhurst Box Co.	Hazelhurst	D L P _x W ₁ Z	D L P _x U ₁ W ₁ Z	D L P _x U ₁ W ₁ Z
Home Box Co.	Crystal Springs		U ₂ W ₁ Z	U ₂ W ₁ Z
Port Gibson Veneer & Box Co.	Fort Gibson	P ₁ U ₁ W ₁	P ₁ U ₁ W ₁	P ₁ U ₁ W ₁
Rathbone, Hair, & Ridgway	Jackson	P ₁ U ₁ X	P ₁ U ₁ X	P ₁ U ₁ X
Slocams Mfg. Co.	Lumberton	Z	Z	Z
Standard Veneer Co.	Columbus	M O ₁ W ₁	M O ₁ W ₁	M O ₁ W ₁

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u> <u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
NORTH CAROLINA				
Bethel Mfg. Co.	Bethel	F	F	
J. M. Brown Co.	Woodland	Z	Z	Z
Carolina Mfg. Co.	Magnolia	L	L	L
		Q	Q	Q
		R		
		Y	Y	Y
Corbett Package Co.	Wilmington	C	C	C
		Z	Z	Z
A. B. Houts & Sons	Elizabeth City	A	A	A
V. D. J. Hughes Co.	Tabor City	L	L	L
Hutten & Bourbonnais	Hickory	G	G	G
		U ₂	U ₂	U ₂
J. R. Kelly	Wallace, Rt. 2	Q	Q	Q
Magnolia Crate Works	Magnolia	Q	Q	Q
Mt. Olive Mfg. Co.	Mt. Olive	C	C	C
		L	L	L
		Y	Y	Y
		Z	Z	Z
L. Rivenback	Wallace		L	L
			Q	Q
Riverside Mfg. Co.	Murfreesboro	C	C	C
		G	G	G
		W ₁	W ₁	W ₁
		Z ₁	Z ₁	Z ₁
		&	&	&
Williamston Package Mfg. Co.	Williamston	C	C	C
SOUTH CAROLINA				
Carter Mfg. Co.	Lake City	C	C	C
		Z	Z	Z
Kearse Mfg. Co. *	Olar		H	

* Production figures not reported

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u>		
		<u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
SOUTH CAROLINA (continued)				
Leigh Banana Case Co.	Leigh (P. O. Ellenton)	C R J W ¹ X ¹ Z	C R J W ¹ X ¹ Z	C R J W ¹ X ¹ Z
S. F. Long	Lexington	B	B	B
Palmetto Veneer Co.	Allendale	Z	Z	
W. B. Rast's Sons Co.	Swansea	B C G H U V W ¹ Z ¹	B C G H U V W ¹ Z ¹	B C G H U V W ¹ Z ¹
D. J. Roof Basket Works	West Columbia	B D Y	B D Y	B D Y
Thompson Manufacturing Co.	Williston	H &	H &	
TENNESSEE				
Dyer Fruit Box Mfg. Co.	Dyer	L U ^x W ¹ Y ¹ Z	L U ^x W ¹ Y ¹ Z	L U ^x W ¹ Y ¹ Z
Malcolm Goldston	Dayton	B	B	B
Harris Bros.	Humboldt	W ¹	W ¹	W ¹
B. C. Jarrel & Co.	Humboldt	C L U ^x W ¹ X ¹ Y Z	C L U ^x W ¹ X ¹ Y Z	C L U ^x W ¹ X ¹ Y Z

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.,</u> <u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
TENNESSEE (continued)				
Nants & Co.	Gleason	L U ₂ W ₁ Z	L U ₂ W ₁ Z	L U ₂ W ₁ Z
Portland Strawberry Crate Co.	Portland	C D L Y Z	C D L U ₁ Y Z	C D L U ₁ Y Z
Ripley Box & Basket Co.	Ripley	C L Z	C L Z	C L Z
Edgar J. Shell	Chattanooga	B	B	B
Shell Basket Works	Chattanooga	B	B	B
VIRGINIA				
Berryville Basket Co.	Berryville	C	C	C
Emporia Mfg. Co.	Emporia	G	G	G
Farmers Inc.	Norfolk	A B C D Y	A B C D Y	A B C D Y
Greenville Mfg. Co., Inc.	Emporia	G U	G U	G U
Nansemond Truck Package Co.	Suffolk	D Y	D Y	D Y
Planters Mfg. Co.	Portsmouth	C G K L O ₂ R T V X Z	C G L R X Z &	C G L R X Z

<u>Name of Manufacturer</u>	<u>Address</u>	<u>Code No.</u>		
		<u>Containers Manufactured</u>		
		<u>1942</u>	<u>1943</u>	<u>1944</u>
VIRGINIA (continued)				
Theo K. Hahn & Son	Franklin	Z	Z	Z
Virginia Barrel Co.	Winchester	E G	E G	E G

CONTAINER VENEER PRODUCERS *

<u>Name of Company</u>	<u>Address</u>
ALABAMA	
Alabama Basket Co.	Eufaula
American Basket & Container Co.	Bay Minette
Bagwell Basket Works	Birmingham
Beatrice Veneer Works	Monroeville
Beaven Jackson Lumber & Veneer Co.	Evergreen
Browder Veneer Works	Montgomery
Decatur Box & Basket Co.	Decatur
Dixie Box & Veneer Co.	York
Howell Veneer Co.	Selma
Hurtsboro Veneer Co.	Hurtsboro
Johnson Veneer Co.	Gilbertown
Malchow & Son	Cullman
McIntyre Veneer Co.	Alberta
Rathbone, Hair & Ridgeway Co.	Jackson
Skinner Veneer Works	Geneva
Standard Basket Mfg. Co.	Guntersville
Taylor, A. R.	Ralph
T. R. Miller Hill Company	Brewton
Troy Veneer & Crate Co.	Troy
Warrior Box Co.	Cypress
W. E. Belcher Lumber Co.	Centerville
Schaffer, Jacob	Cullman

FLORIDA

Adkins Mfg. Co.	Gainesville
Consumers Lumber & Veneer Co.	Apopka
Cummer Sons Cypress Co.	Otter Creek
Cummer Sons Cypress Co.	Jacksonville
Dixie Veneer Co.	Auburndale
Elberta Crate & Box Co.	Tallahassee
Citrus Fruit Products Co.	Espanola
Franklin Lumber & Basket Co.	Micanopy
Greenville Veneer & Crate Co.	Greenville
Great Southern Box Co., Inc.	Orlando
Highland Crate Coop.	Bonifay
Irvine Crate & Basket Co.	Irvine
Keyville Lumber Co., Inc.	Keyville
Nants Mfg. Co.	Live Oak
Nocatee-Manatee Crate Co.	Callahan

* This list furnished by U. S. Forest Service

Name of Company

Address

FLORIDA (continued)

Ocala Mfg. Ice & Packing Co., Inc.	Ocala
Revell, K. D. Mfg. Co.	Wauchula
Russ Crate Mill	Coleman
Russ Crate Co.	Houston
S. O. Shinholser	Sanford
St. Johns Box Co.	Palatka
Tampa Box Co.	Tampa
Walling Crate Co.	Leesburg
Goethe, P. B.	Mt. Dora
Maxwell Bros., Inc.	Jasper
Nocatee-Manatee Crate Co.	Manatee

GEORGIA

Alexandria Wood Products	Athens
Dayton Veneer & Lumber Mill	Americus
Douglas Veneer Co.	Wray
Elberta Crate and Box Co.	West Bainbridge
Georgia Crate & Basket Co.	Thomasville
Georgia Veneer & Package Co.	Brunswick
Houston Mfg. Co.	Abbeville
Lokey Veneer Co.	Thompson
Maxwell Bros., Inc.	Macon
Menlo Fruit Package Co.	Menlo
Pearson Basket Mills, Ltd.	Fort Valley
Perry Veneer Co.	Perry
Pierpont Mfg. Co.	Savannah
Prinscho Veneer Co., Inc.	Valdosta
Rathborne, Hair-Ridgeway Co.	Savannah
Simmons Bros.	Arlington
Southern Crate & Veneer Co.	Macon
Wadley Veneer & Basket Co.	Millen
Wadley Veneer & Basket Co.	Wadley
Gibson, J. L.	Red Oak
Rathborne, Hair-Ridgeway Co.	Sandersville

KENTUCKY

New Albany Box & Basket Co.	Louisville
Paducah Box & Basket Co.	Paducah

Name of Company

Address

MISSISSIPPI

Leaksville Veneer Co.	Leaksville
Martin Veneer Co.	Pascagoula
Beaumont Veneer Co.	Beaumont
Chicago Mill & Lumber Corp.	Greenville
Clairborne Veneer Co.	Port Gibson
Foxworth Veneer Co.	Foxworth
Green Veneer Co.	Leaf
Monticello Veneer & Plywood Co.	Monticello
Natchez Veneer & Lumber Mill.	Natchez
Picayune Veneer Co.	Picayune
Port Gibson Veneer Co.	Port Gibson
Slocumb Mfg. Co.	Lumberton
Southern Pkg. Corp.	Hazelhurst
Standard Veneer Co.	Columbus
Young, R. J. & Son	Oma
Wayne Veneer & Lumber Co.	Waynesboro

NORTH CAROLINA

Beck & Sechrest Veneer Co.	Statesville
McLeod Veneer Co.	Wadesboro
Brown, J. M. & Co.	Woodland
Carolina Mfg. Co.	Magnolia
Columbus Mfg. Co.	Chadbourn
Corbett Package Co.	Wilmington
Houtz, A. B. & Son, Inc.	Elizabeth City
Mt. Olive Mfg. Co.	Mt. Olive
North Carolina Veneer Co.	Bridgeton
North Carolina Lumber Co.	Hallsboro
Plymouth Box & Panel Co.	Plymouth
Riverside Mfg. Co.	Murfreesboro

SOUTH CAROLINA

Hollywood Beaufort Package Co.	Adams Run
American Wood Products Co.	Marion
Anderson, J. L. Veneer Co.	Cheraw
Carter Mfg. Co.	Lake City
Kearse Mfg. Co.	Olar
Leigh Banana Case Co.	Ellenton
Roof, D. J. Basket Works	West Columbia
Stilley Plywood Co.	Conway
Veneer Mfg. Co.	Conway
Williston Mfg. Co.	Williston
Conway Veneer Co.	Conway
Long, S. F.	Lexington
Powe Veneer Co.	Camden
Rasts, W. B. Sons Co.	Swansea

Name of Company

Address

TENNESSEE

Dyer Fruit & Basket Co.	Dyer
Farmer, J. R.	Knoxville
Gholdston, W. M.	Dayton
Hobac Veneer & Lumber Co.	Memphis
Jarrell, B. C. & Co.	Humboldt
McAdoo Co.	Martin
Milan Box Co.	Milan
Nants & Co.	Gleason
Ripley Box & Basket Co.	Ripley
Strawberry Crate Co.	Portland

VIRGINIA

Berryville Basket Co.	Berryville
Farmers, Inc.	Norfolk
Interstate Veneer Co.	Emporia
Nansemond Truck Package Co.	Suffolk
Planters Mfg. Co.	Portsmouth



